MidAmerican Energy Company

Iowa Energy Efficiency Experience March 2005



MidAmerican's Energy Efficiency Objective

Assist customers in managing energy use, reducing costs, improving productivity, and improving the environment.



MidAmerican Background

In 15 years of energy efficiency experience, MidAmerican has built:

Experienced Infrastructure

- Internal staff
- Implementation contractors
- Strong trade ally network
- Local and national partnerships
- Regulatory framework

Successful Programs

- Cost-effective resources
- Significant energy savings
- Satisfied customers
- National recognition



Delivery Strategy

MidAmerican manages programs with internal staff, but leverages the expertise of outside implementation firms.

Internal Staff:

- Maintain strategic control of implementation
- Rely on competitive process to hire contractors
 - RFP processes
 - Multiple contractors
 - Most benefit for least cost
- Provide implementation "nuts and bolts" when appropriate

Implementation Contractors:

- Provide specialty expertise in delivery (e.g., energy audits, design assistance)
- Provide specialty expertise for support (e.g., advertising, evaluation)
- Share experience gained from working with other programs
- Provide flexibility to meet seasonal program demand



Trade Allies

MidAmerican maintains a trade ally network of Iowa (and Illinois) businesses that benefit from efficiency programs.

Trade Ally Businesses

- Equipment dealers (lighting, HVAC, etc.)
- Service firms (engineering firms, architects, electricians)
- Real estate developers (home builders and commercial developers)
- Network currently includes 6,500 firms; 40% of which are very active

Network Management

- Maintain adequate coverage (region, type, etc.)
- Exchange information (program rules, new program ideas, etc.)
- Advertising and promotion
- Recognition and awards



Partnerships

MidAmerican is active in local, regional, and national partnerships that help us improve programs for customers.

Local/State

- ASHRAE
- APEC
- Iowa Home Builders Association
- Iowa Association of Energy Efficiency
- Iowa Energy Center
- Iowa Office of Consumer Advocate
- Iowa Utilities Board
- State universities
- Contractor groups (SMACNA, IHPA)

Regional/National

- Midwest Energy Efficiency Alliance
- Association of Energy Service Professionals
- Consortium for Energy Efficiency
- American Council for an Energy Efficient Economy
- Peak Load Management Alliance
- Association of Energy Engineers
- EPA/Energy Star
- E Source
- US Department of Energy



Regulatory Framework

lowa's framework provides utilities the flexibility to succeed, while giving regulators needed information and oversight.

Structure

- Periodic development of 5-year Energy Efficiency Plans, approved through contested cases
- Key planning objective is program cost-effectiveness, from a broad, societal perspective
- Annual reporting on progress
- Contemporaneous cost recovery through energy-based riders
- Waivers and/or modifications for significant deviation from Plan
- Utilities Board can order prudence review

Benefits

- Board and other parties receive needed information without excessive red tape
- Utilities have flexibility to meet changing conditions:
 - Manage to overall budget and goals
 - Pilot programs to test new ideas
 - Waivers or modifications to make piece-wise changes
- Customers benefit from utilities' focus on customers rather than regulators
- Customers benefit from stability of programs



Cost-Effective Resources

lowa's programs meet strict cost-effectiveness guidelines to ensure lower costs to customers over the long term.

Approach

- Utilities and regulators coordinate on a joint assessment of potential energy efficiency technologies.
- Utilities screen technologies against their individual avoided supply costs to identify cost-effective measures to include in programs.
- Utilities structure programs including costs for administration, advertising, financial incentives, etc.
- Utilities then screen programs against avoided supply costs to ensure costeffective programs.

Benefits

- Customers pay for programs and individual measures that cost less than power and gas supply alternatives
- lowa focuses on societal test, which measures program impacts on society as a whole (including environmental and other externality impacts)
- lowa also evaluates other costeffectiveness perspectives, including impacts on utility revenue requirements, utility rates, and program participants



Energy Savings

The programs significantly reduce MidAmerican's power and gas supply needs and related revenue requirements.

Cumulative savings to date:

- 450 MW
- 600 million kWh/year
- 30 million therms/year
- \$40 million per year in net savings to customers
- Each dollar spent lowers longterm revenue requirements by more than \$2.50

Share of overall supply:

- 13% of peak demand
- 4% of electric sales
- 5% of gas sales



Customer Satisfaction

Energy efficiency programs contribute to MidAmerican's high customer satisfaction.

Programs help customers:

- Manage energy costs
- Respond to volatile energy costs (e.g., gas price increases)
- Maintain business competitiveness
- Enhance comfort and convenience
- Improve the environment

Participation is widespread:

- In 2004, participation included:
 - 10% of residential households
 - 60% of large industrials
- SummerSaver covers over 20% of single-family homes
- Over 30% of single-family homes have received site-based or online energy audits



Awards

State and national organizations recognize MidAmerican's programs as being among the best in the country.

- Peak Load Management Alliance: Outstanding Achievement Award
- Five Energy Star Awards
- Presidential Energy Efficiency Education Award
- Iowa Governor's Energy Efficiency Leadership Award



Recommendations

- Recognize that Illinois utilities differ from each other.
 - Customer bases
 - EE expertise
 - Resource needs

One size may not fit all.

- Let MidAmerican expand current programs to benefit Illinois customers as well as Iowa customers.
 - Leverage existing success
 - Gain economies of scale in expanding current programs
 - Quad Cities is one market

Don't make us reinvent the wheel.



Recommendations

- Focus on customer satisfaction.
 - Excellence in program delivery
 - Don't start and stop programs to meet budget cycles

Once started, this is a long term commitment.

- Provide broad goals, not prescriptive requirements.
 - Focus on cost-effective programs and customer satisfaction
 - Don't prescribe programs
 - Don't prescribe budgets or savings goals for all utilities
 - Don't require long-term third party implementation

Give utilities the flexibility to succeed.



Recommendations

- Define reasonable rules.
 - Planning requirements
 - Reporting requirements
 - Cost-recovery provisions
 - Reasonable risks and rewards

Let utilities focus on serving customers.

- Take advantage of MidAmerican's experience.
 - Drafting administrative rules
 - Helping other utilities get up learning curve
 Let us help.



Questions?



Appendix

- Energy Efficiency Programs
- 2004 Spending



Programs

Nonresidential

- Equipment
- Custom Systems
- BusinessChecksm
- EnergyAdvantage® Analysis
- Efficiency Bidsm
- Commercial New Construction
- Curtailment

<u>Residential</u>

- Equipment
- HomeChecksm
- Low Income
- New Homes
- SummerSaversm

<u>Other</u>

- Trees
- Assessments
 - Iowa Energy Center
 - Iowa Global Warming Center



2004 Spending

- \$35 million total
 - \$22 million electric
 - \$11 million gas
 - \$2 million trees/assessments
- As % of lowa revenue
 - 2% of electric revenue
 - 1.5% of gas revenue
- 50% residential/50% nonresidential
- 50% of electric for load management

2004 Energy Efficiency Spending (\$35.2 Million Total)



